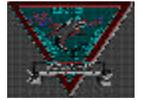


MIUW-SU NEWSLETTER



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INTRODUCING THE NEW PROGRAM MANAGER

CDR Williams reported to the Space and Naval Warfare Systems Command in July 2000. She is assigned to PMW183 relieving CDR Cumming as the MIUW program manager.

Prior to reporting to SPAWARSSYSCOM, CDR Williams served as the Navy's Head Officer Strength Planner in the Officer Plans and Policy branch of CNO (N131) from September 1998 to July 2000. She was responsible for providing current officer data and forecasts for the formulation of the over \$4B officer portion of the MPN account. CDR Williams has also served as an analyst in the Human Systems Integration branch of CNO (N125) where her primary focus was manpower and training considerations as part of the acquisition process in the design, development and production of new weapon systems. She has also served as an analyst (IUSS, Submarine and Special Forces programs) for the Undersea Warfare Division of OPTEVFOR. Her other billets include: Officer in Charge of Personnel Support Detachment, Portsmouth, IUSS and C4I analyst in N81, data analyst for the Joint Data Systems Support Center and Admin and Assistant Supply Officer at Naval Communications Station, Greece.

MMF HAPPENINGS

The MIUW Maintenance Facility (MMF) has actively supported several OCONUS exercises and other activities recently. They have just completed the Phase-I Re-baseline and upgrade/ruggedization on the RSSC pre-positioned in Bahrain. Support was also provided for two maintenance detachments to Korea, and the LASS training in San Diego and LASS assessment during Sea Hawk in Puget Sound. The MMF has responded to several requests for Tech Assists from units at various unit locations including Thailand, Puerto Rico and Korea.

The MMF is also finalizing the Phase-I Re-Baseline schedule for all the units, which includes the installation of ESM, MSP Genset upgrade, TIS/VIS camera and monitor replacement and upgrading the SQR-17a for the LASS.

HELP DESK Hours: 0800 – 1600 Pacific Time Monday - Friday HELP DESK Phone #: 1-888-571-6388 Toll free

MIUW PROGRAM OFFICE CHANGE OF OFFICE CODE

On August 1st, the MIUW Program Office at SPAWAR changed office codes from PMW-182 to PMW-183. This transfer will have a positive impact on the overall MIUW program because of the similarities between MIUW and the Advanced Deployable System (ADS) managed by PMW-183.

Please ensure that all message traffic and correspondence reflect the change in office code.

Individual office codes are as follows:

CDR Michele Williams	183M
Marjorie Andres	183MSC
Kevin Washburn	183M1
CDR Curtis Whalen	183M2
LCDR Matt McMillan	183M3
OSCS(SW) Delano Forte'	183M4
Dr. Larry Hallanger	183MC
MIUW FAX NUMBER:	619-524-3348

INSHORE BOAT UNIT



Acceptance Trials for the first of the new Inshore Patrol Boats will start on 13 November, 2000. If all goes well the last boat will be delivered in February, 2001. SPAWAR has now installed the

necessary modifications to deploy and recover the Littoral Acoustic Sub System in IBU 13 and IBU 17's boats. Once again the boats performed flawlessly while deploying and recovering arrays in both San Diego and in Puget Sound. Fourteen mounting bracket kits are being manufactured and will be distributed to both Naval Coastal Warfare Groups for installation. Once these have been installed, it will be possible for the boats to embark the Small Boat Deployment System without further modification. The kits will be delivered in February, 2001.

IMPORTANT DATES AND EVENTS

13 Nov—Acceptance Trials on new IBU Boat
16 Nov—Executive Steering Group Meeting—TBD
19 Nov—NCWG One CO's Conference

ROLE OF THE TECHNICAL DEVELOPMENT AGENT (TDA) IN MIUW-SU

Over the past eight years the Advanced Systems Division, Code D37 at SPAWAR Systems Center San Diego (SSC-SD) has served as the Technical Development Agent (TDA) for the MIUW System Upgrade Program. But what does that really mean in terms of our role and responsibilities? In formal acquisition programs the TDA provides technical and engineering efforts in the early stages of an acquisition program. These efforts include research and development, prototyping and test and evaluation. In most cases the TDA is a government research laboratory which may in turn garner additional expertise from other government labs or from the private sector, either academia or industry. The TDA works closely with the designated Program Manager to plan, design and engineer a system which meets the requirements of the Operational Requirements Document (ORD).

That being said we all know that the MIUW System Upgrade Program is certainly not a structured acquisition program, isn't funded to do research and development and doesn't have an ORD (yet!). So what is the role then of the MIUW TDA?

The TDA team at SSC-SD provides a variety of engineering and support services to the MIUW-SU program for both hardware and software products. Early in the program we were tasked to identify and evaluate available Commercial-Off-The-Shelf (COTS) equipment items which could be used to rapidly upgrade the capabilities of the MIUW units. In addition we were asked to leverage prototyping work which had been done for other DoD R&D programs, in particular a Graphical Data Fusion System (GDFS)-like software product and a remotely operated High Mobility Multi-wheeled Vehicle (HMMWV), and rapidly modify them into a prototype of the current GDFS and Mobile Sensor Platform (MSP). This effort was completed in less than nine months and a prototype system concept demonstration was first performed in 1992. At the same time technical experts from SSC-SD were providing support to the Program Manager in the acquisition of sonar, acoustic array and ESM subsystems.

Due to the unique nature of the MIUW program and the desire to accelerate delivery, it was decided to move from the concept development phase directly to production. Therefore SSC-SD was asked to quickly transform the prototype into a production design and commence MSP production. While actual end-item production is certainly outside the normal TDA role, it was recognized that we had assembled the right team to complete the effort. The MSPs have been in production at SSC-SD since 1993 and

production wraps up this fall with the completion of MSP #22. The Small Boat Deployment System (SBDS) was also designed and fabricated under SSC-SD oversight, as was the Windows NT version of GDFS (delivered with Van CO4R this August) which was completed this year by a team of SSC-SD and contractor personnel. In addition the TDA has worked closely with IUW subject matter experts to design and construct more complex scenarios for the Readiness Trainer System. In FY01 the TDA will be assisting in the evaluation and selection of upgrades to the Light Array Sub-System and providing technical oversight on the production of the reconfigured MIUW to be delivered for systems 18-22. In addition we will be working with the Program Office and the fleet to identify workable and cost-effective technical solutions to operational requirement such as swimmer detection, common operating picture, increased radar range, and improved RF communications.

Now that multiple upgrade systems have been delivered to the MIUW units, our responsibilities as TDA are moving more towards that of technical consultant providing sound engineering analyses, advice, guidance, training and support to our co-workers at the MIUW In-Service Engineering Activity, to the staff of the MIUW Program Management Office at SPAWAR PMW-183 and to our fleet customers in the Naval Coastal Warfare community.

SSC-SD MIUW PROGRAM MANAGER

I have been a member of the MIUW-SU team at SSC-SD since the program first started in 1992 (when I was the only person who knew what the acronym MIUW stood for!) I feel fortunate to have helped navigate the program through its many, many, twists and turns over the past eight years. I have truly enjoyed the opportunity to have worked with so many fine folks, civilian and military, from a multitude of different organizations. We have come a long way from those two weeks in August 1993 when MIUW 112 did their Annual Training in San Diego to help us conduct an Early User Assessment on the first prototype system upgrade!

Earlier this year I was selected to become Manager of the Advanced System Division, my responsibilities have expanded to include oversight on not only the MIUW project, but a variety of other Physical Security, Robotics and Law Enforcement Technology programs for the Navy, Army, DoD and other Federal Agencies. Consequently beginning on September I will no longer be involved in the daily operations of the MIUW Program, but am confident that I am transitioning the work into very capable hands. Dave Jones (SSC-SD D33) will provide overall day to day management on the project at SSC-SD, while Tom Pastore (SSC-SD D374) and Mark Joplin (SSC-SD D335) will be responsible for the TDA and ISEA functions respectively. I look forward to seeing the program's continued success under their leadership. Celia Metz

MIUW REBASELINE IMPLEMENTATION

The SPAWAR Systems Center, San Diego (SSC-SD) In-Service Engineering Agent (ISEA) has begun system upgrades and is currently developing the plan for the MIUW-SU Re-Baseline Effort. This effort will result in all MIUW systems receiving the latest equipment upgrades, ECPs, and provide a common baseline for all fielded systems. This re-established baseline would provide improved reliability, maintainability and supportability.

The Re-Baseline effort is planned for two phase execution. Phase I is associated with the MSP, PSP, and their related equipment in the shelter. Many of the more recent system deliveries have most of the MSP/PSP updates, so the level of effort required to Re-Baseline individual systems will vary. This effort includes an upgrade to the MSP Genset, new PDU and mast actuator, new TIS/VIS cameras, color monitors in the SAU and shelter, RTP and microwave ruggedization and installation of the ESM and the embedded Readiness Training Systems. The sonar system will be upgraded for DIFAR and array capability with an embedded trainer. All Phase I work will be completed on site at the Unit location, typically over a 5-10 day period and will include training for Unit personnel at the completion of the install.

Phase II efforts will be comprised of a Communications Equipment Suite Upgrade and will take place in our facility at SSC-SD. This segment of the work effort removes and reconfigures Racks 1-4 of the Communication Suite and will take approximately 7 weeks, including new cable raceway, installation and test of the new equipment, and the shipping time to receive and send a shelter back to the Unit. The Unit will also receive a mini-SOVT at their location to demonstrate proper operation of all newly installed equipment and systems. The major component upgrades for the Communications Upgrade are the VICS radio, SINCGARS capability, and NAVMACS messaging system.

There was a planning meeting 10 August to discuss all phases of the MIUW Re-Baseline effort including scheduling of assets and implementation strategies. One concept explored is to perform all upgrades for a floating system at SSC-SD, then ship it on to the next Unit for replacement of their system thus eliminating any operational downtime. NCW Group One and NCW Group Two personnel will be active members in this planning evolution, as will SPAWARSSCOM PMW183 and SSC-SD D335.

TRAINING

The MIUW Program Office conducted the first Light Array Sub System (LASS) and Small Boat Deployment System (SBDS) class 17-28 July in San Diego. Naval Coastal Warfare Group ONE (NCWG ONE) and Inshore Boat Unit Seventeen hosted the class that was held at Naval Air Station North Island. Mr. Tom Pastore (SSC-SD) and Mr. Tony Wheeler (STGCM Ret) taught the LASS component, while Dr. Roy Yumori (SSC-SD) and Scott Endo (SAIC) taught the SBDS component. Attendees included representatives from NCWG ONE and TWO, and from Mobile Inshore Undersea Warfare Units 101, 102, 103, 105, 106, 109, 201, and 203. Additionally, STGC Chesmar, an acoustic specialist from the Office of Naval Intelligence, attended.

Instruction consisted of both classroom and operational training in the Radar Sonar Surveillance Center (RSSC). The training in the RSSC van was split between running scenarios using the Readiness Trainer System (RTS), and live acoustic signals from arrays deployed just outside San Diego Bay. Topics covered included a system overview, linear array fundamentals, bearing ambiguity, multi-sensor correlation, search planning, target motion analysis, and mission planning (including the use of Route functions in the Precise Lightweight Global Position System Receiver).

The use of the RTS to provide training on a specific skill was validated. Both instructors and the students were pleased with the effectiveness of that portion of the training. The actual array deployments went well, and provided two of the three planned array locations. The third array deployment, which was to have been in the Radio Frequency telemetry configuration, was not successful. This meant our multi-sensor tracking capability was somewhat limited. Nonetheless, students were highly successful in tracking a controlled sub-surface contact on two days when it was available near the end of the second week of training.

Major accomplishments of this evolution included the development of the class curriculum, feedback from the first class of students on the material provided (including the draft Operations Guideline), a multiple-array deployment and recovery cycle, and successful tracking using multiple arrays (and DIFAR sonobuoys). The next step in fleet familiarization with the LASS was using the equipment in Exercise SEAHAWK in Puget Sound.

Special thanks to NCWG ONE, STGCS Langston; MIUW 106 for use of the MIUW System Upgrade, trucks and generators and STG2 Mazzola; IBU 17 for providing the boats and crew – BMC (sel) Neal; and ET1 Gaxiola who served as GDFS operator, boat crew, and PAO (photographer). The next class will be held for NCWG TWO.

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